

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,412	10/01/2003	Tsuyoshi Yamamoto	NIT-293-02	5169
24956	7590 04/23/2004		EXAM	INER
MATTINGLY, STANGER & MALUR, P.C.			YAM, STEPHEN K	
1800 DIAGO	NAL ROAD			
SUITE 370			ART UNIT	PAPER NUMBER
ALEXANDR	ALEXANDRIA, VA 22314			,

DATE MAILED: 04/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/674,412	YAMAMOTO ET AL.				
Office Action Summary	Examiner	Art Unit				
	Stephen Yam	2878				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on	_•					
2a)☐ This action is FINAL . 2b)☒ This	This action is FINAL . 2b)⊠ This action is non-final.					
•	,—					
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>11-18</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrav	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.	5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>11-18</u> is/are rejected.	☑ Claim(s) <u>11-18</u> is/are rejected.					
7) ☐ Claim(s) is/are objected to.	Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	г.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priorical application from the International Bureau * See the attached detailed Office action for a list of the priorical action for	s have been received. s have been received in Applicati ity documents have been receive ı (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4)					
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 1003. 		atent Application (PTO-152)				

Application/Control Number: 10/674,412

Art Unit: 2878

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 11, 12, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Jöbsis et al. US Patent No. 4,380,240.

Regarding Claim 11, Jöbsis et al. teach (see Fig. 1) a head setter for using living body measurement by light (see Col. 3, lines 25-32), said head setter to be put on a living body, comprising an optical fiber holder (35) provided with at least a pair of optical fibers (75, 80), one for irradiation (see Col. 6, lines 51-52) and the other for detection (see Col. 6, line 67 to Col. 7, line 1), and a flexible resin part (30, 40-43) (inherently, Velcro is made of molded plastic, a form of resin- see Col. 6, lines 12-19) provided with a guide (30) that enables said optical fiber holder to move in a specific direction (by detaching and re-attaching the Velcro strips (40-43) in different positions on the guide (30), since the guide is flexible- see Col. 6, lines 3-9), wherein said optical fiber holder is detachably provided on the guide of said flexible resin part (see Col. 6, lines 20-26).

Regarding Claim 12, Jöbsis et al. teach (see Fig. 1) the flexible resin part having a stopper part (40-43) that prevents said flexible resin part from deforming (after strapping the device onto a body part- see Col. 6, lines 14-19), whereby said optical fiber holder can be placed at any spot on the living body (see Col. 3, lines 25-33 and Col. 6, lines 6-9).

Application/Control Number: 10/674,412

Art Unit: 2878

Page 3

Regarding Claim 17, Jöbsis et al. teach (see Fig. 1) an optical measurement system by light (see Col. 3, lines 25-32), comprising a light irradiator (see Col. 4, lines 12-15) for irradiating a living body of a subject with light, and a light detector (see Col. 4, lines 15-20 and Col. 3, lines 9-15) for detecting the light that has been emitted from said light irradiator and which has propagated through the living body ("deeply penetrating light"- see Col. 5, lines 3-6), wherein said light irradiator and said light detector are installed in a head setter (see Fig. 1) to be placed on the living body (See Col. 3, lines 25-32), said head setter having an optical fiber holder (35) provided with at least a pair of optical fibers (75, 80), one for irradiation (see Col. 6, lines 51-52) and the other for detection (see Col. 6, line 67 to Col. 7, line 1), and a flexible resin part (30, 40-43) (inherently, Velcro is made of molded plastic, a form of resin- see Col. 6, lines 12-19) provided with a guide (30) that enables said optical fiber holder to move in a specific direction (by detaching and re-attaching the Velcro strips (40-43) in different positions on the guide (30)), said optical fiber holder being detachable provided on the guide of said flexible resin part (see Col. 6, lines 20-26).

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 13-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ivers et al. US Patent No. 5,339,810.

Art Unit: 2878

Regarding Claims 13 and 14, Ivers et al. teach (see Fig. 1 and 5) a head setter for using living body measurement by light (see Col. 2, lines 19-30), said head setter having a shape to be put on a living body (see Col. 3, lines 61-65 and Col. 4, lines 53-54), comprising a main body (11, 12, 14) comprised of a flexible resin part (14) (inherently, plastic is a resin- see Col. 3, lines 55-57), and equipped with an optical fiber holder (86), a stopper (top of (22)), and a joint ((36) on (12)), said optical fiber holder provided for holding an optical fiber (84) (see Fig. 5 and Col. 5, lines 42-51) for irradiation, said flexible resin part provided with a guide (11) that enables said optical fiber holder to move in a specific direction, and said stopper and said joint fixed on said main body for disposing said optical fiber holder at any position between said stopper and said joint (see Col. 4, lines 44-57), wherein said optical fiber holder is detachably provided on the guide of said flexible resin part (see Fig. 5). Regarding Claims 14, 16, and 18, Ivers et al. teach (see Fig. 5) the optical fiber holder provided with an optical fiber for irradiation connected to a light irradiator (82). Regarding Claims 15 and 18, Ivers et al. teach (see Fig. 1) the main body shaped with a semicircular portion (12) (see Col. 4, lines 4-6) to be put on a living body (see Col. 3, lines 61-65 and Col. 4, lines 53-54), wherein the stopper restricts the movement of the optical fiber holder on the guide of said flexible resin part (see Col. 4, lines 48-55), and wherein said stopper is fixed on a position (left/right edge) shifted from the center position of the semicircular portion of said main body. Ivers et al. do not teach the embodiment for also provided with and holding an optical fiber for light detection, connected to a light detector. However, Ivers et al. teach (see Fig. 12) a separate similar embodiment of a head setter for using living body measurement by light, with an optical fiber holder (172) provided for holding a pair (in (178)) of optical fibers, one for irradiation (part of (178) going to (182)) and the other for light detection

Art Unit: 2878

(part of (178) going to (186)), and provided with the two optical fibers, one (part of (178) going to (182)) for irradiation connected to a light irradiator (182) and the other (part of (178) going to (186)) for detection connected to a light detector (186). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a second optical fiber for light detection as taught by the Fig. 12 embodiment of Ivers et al. in the Fig. 5 embodiment of Ivers et al., to provide a disposable measurement device while retaining both the LED and detector, as taught by Ivers et al. (see Col. 8, lines 7-12).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shemwell et al. US Patent No. 6,095,974, teach a device for living body measurement by light, with an optical fiber holder detachably provided on a flexible resin part.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Yam whose telephone number is (571)272-2449. The examiner can normally be reached on Monday-Friday 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on (571)272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/674,412

Art Unit: 2878

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SY

SY

THANH X LUU PANENT EXAMINER

Page 6